## Boi data

| 1. | Latest Passport<br>Photograph    |  |
|----|----------------------------------|--|
| 2. | Working Mobile No.               | 99155-11200  |
| 3. | Working Email ID                 | singhmaninder25@yahoo.com  |
| 4. | Residential Address              | #17, Urban Estate, Phase 1, Urban Estate, Patiala                    |
| 5. | Full Qualification               | B.E.(Electronics), M.Tech. (Computer Science & Engineering),<br>Ph.D |
| 6. | No of Ph.D. Students<br>Enrolled | 2  |

7. Ph.d. Students Registered details

| S.No. | Name           | Торіс   | Date of<br>Registration | Faculty               |
|-------|----------------|---|-------------------------|-----------------------|
| 1.    | Guravtar Singh | Development of IEEE 802.11e<br>Channel Access Scheme for<br>Improving Quality of Service                    | 28/07/2014              | Computing<br>Sciences |
| 2.    | Tejinder Singh | Design and Development of<br>Admission Control Scheme for<br>Improved Quality of Service in<br>IEEE 802.11e | 15/09/2914              | Computing<br>Sciences |
| 3.    | Sunil Kapoor   | Big Data Analytics Technique<br>for Breast Cancer Detection   | 23/11/2015              | Computing<br>Sciences |

8. Ph.D. Students awarded Degrees (Student Name, Topic, Award of Degree, Faculty)

| S.No. | Name         | Торіс                         | Award of   | Faculty  |
|-------|--------------|-------------------------------|------------|----------|
|       |              |                               | Degree     |          |
| 1.    | Vishal Singh | Improved Energy Efficiency in | 30/11/2016 | Physical |
|       | _            | Wireless Sensor Networks      |            | Sciences |
|       |              | Using Duty Cycling Approach   |            |          |

9. Awards and Recognition: N.A.

10. Completed Projects (Title of the Project, Funding Agency, Duration, PI and Co-PI Details, Approved Outlay(in Lacs)): N.A.

11. Ongoing Projects : N.A.

## 12. Research Publications Complete List:

| 1.  | Saruchi Singla, Maninder Singh, "Performance Analysis of QoS Scheduling in WIMAX Network", International Journal of Applied Engineering Research, Volume 6, No. 18, pp.   |
|-----|---|
|     | 2464-2467, 2011.  |
| 2.  | Prabhjot Kaur, Maninder Singh,"Vertical Handover between WLAN and UMTS by Standard Integration Models", International Journal of Applied Engineering Research, Volume 6, No. 18, pp. 2587-2591, 2011.   |
| 3.  | Maninder Singh, Jyotsna Sengupta, "Performance Analysis of OBDLB Channel Allocation Algorithm", International Journal of Computer Applications, iRAFIT - Number 1, pp. 19-24, 2012  |
| 4.  | Saruchi Singla, Maninder Singh, "Analysis of Packet Scheduling in WiMax Network",<br>International Journal of Computer Applications, iRAFIT - Number 4, pp. 13-17, 2012   |
| 5.  | Prabhjot Kaur, Maninder Singh, "Comparative Analysis of Vertical Handover in Integrated Networks", International Journal of Computer Applications, iRAFIT - Number 9, pp. 38-42, 2012   |
| 6.  | Anjali, Maninder Singh, "Simulation and Performance Analysis of AODV,OLSR,GRP<br>Routing Protocol by considering IEEE 802.11Standard", International Journal of Advanced<br>Research in Computer Science and Software Engineering, Volume 2, Issue 6, pp. 171-<br>178, June 2012. |
| 7.  | Anjali, Maninder Singh, "Performance Analysis of Proactive, Reactive and Hybrid MANET<br>Routing Protocols on IEEE 802.11 Standard", International Journal of Computer<br>Applications, Volume 54– No.12, pp. 1-8, September 2012.  |
| 8.  | Amandeep Singh Dhaliwal, Maninder Singh, "Performance Analysis of Opportunistic<br>Routing in Multi-Sink Mobile Ad Hoc Wireless Sensor Networks", International Journal of<br>Computer Applications, Volume 54, No.7, pp.44-49, September 2012.                                   |
| 9.  | Narinderjeet Kaur, Maninder Singh, "Caching Strategies in MANET Routing Protocols",<br>International Journal of Scientific and Research Publications, Volume 2, Issue 9, pp. 1-6,<br>September 2012.  |
| 10. | Narinderjeet Kaur, Maninder Singh, "Effects of Caching on the Performance of DSR Protocol", OSR Journal of Engineering (IOSRJEN), Volume 2, Issue 9, pp. 7-11, September 2012   |
| 11. | Gurkamal Singh, Maninder Singh, "Performance Analysis of WiMAX under Single and<br>Multi-Carrier Jamming", International Journal of Computer Science and Network Security,<br>Volume13, No.7, pp. 144-148, July 2013.   |
| 12. | Mandeep Singh, Maninder Singh, "Performance of AODV, GRP and OLSR Routing<br>Protocols in Adhoc Network with Directional Antennas", International Journal of Computer<br>Applications, Volume 83, No. 2, pp. 12-18, 2013.   |
| 13. | Manveer Kaur Sroya, Maninder Singh,"Comparison of Various Scheduling Schemes for Voice over LTE Networks", International Journal of Computer Applications, iCAMT, pp. 28-33, 2013   |
| 14. | Rabia Sehgal, Maninder Singh, "HOCSA: An Efficient Downlink Burst Allocation Algorithm to Achieve High Frame Utilization", International Journal of Technical Research and Applications, Volume 2, Issue 5, pp. 107-112, Sep-Oct 2014.  |
| 15. | Rubina, Maninder Singh,"Partition Base CAC with Queuing Model for 802.16e",<br>International Journal of Advanced Research in Computer Science and Software<br>Engineering, Volume 4, Issue 6, pp. 1066-1077, June 2014.   |
| 16. | Rubina Gill, Maninder Singh,"Capacity Utilization and Admission Control in 802.16e WiMAX", International Journal of Information & Computation Technology, Volume 4,   |

|     | Number 16, pp. 1679-1685, 2014.  |
|-----|--|
| 17. | Sumanpreet Kaur, Maninder Singh,"Design and Implementation of an Efficient Scheduling                          |
|     | Algorithm for QoS Management in WiMAX", International Journal of Computer Science                              |
|     | and Mobile Computing, Volume 3, Issue. 7, pp. 731-739, July 2014.  |
| 18. | Nimrat Kaur Kehal, Maninder Singh, "Seamless Vertical Handoff between WLAN and                                 |
|     | WiMAX", International Journal of Computer Science and Mobile Computing, Volume 3                               |
|     | Issue.7, pp. 921-929, July 2014.   |
| 19. | Deepti Gupta, Maninder Singh, "Adaptive Channel Allocation for Cellular Networks using                         |
|     | the Bandwidth Aware Call Admission Control for Sub-Channels (BACAC-SC)",                                       |
|     | International Journal for Scientific Research & Development, Vol. 4, Issue 07, pp. 502-                        |
|     | 505, 2016.   |
| 20. | Gurwinder Singh, Maninder Singh, "A SURVEY OF DESIGN AND IMPLEMENT FOR   |
|     | BANDWIDTH ESTIMATION MODULE FOR ENHANCING QOS IN IEEE 802.11E  |
|     | WIRELESS LAN", International Journal In Applied Studies And Production Management,                             |
|     | Volume2, Issue 4, pp. 39-47, 2016.   |
| 21. | Harpreet Kaur, Maninder Singh, "K-mean Clustering of Big Data Over Map Reduce",                                |
|     | Imperial Journal of Interdisciplinary Research, Vol-2, Issue-10, pp. 1053-1057, 2016.                          |
| 22. | Maninder Singh, Vishal Singh, "A survey of Optimizing Energy Utilization in Wireless                           |
|     | Sensor Network using Duty Cycle Approach", International Journal of Advanced Research                          |
| 00  | in Computer Science, Volume 7, No. 3, pp. 202-205, 2016.   |
| 23. | Vishal Singh, Maninder Singh, "A Clustering based Cross Layer Protocol for optimizing                          |
|     | Energy Efficiency in Wireless Sensor Network using Duty Cycling Approach", International                       |
|     | Journal of Advanced Research in Computer and Communication Engineering, Vol. 5,                                |
| 24. | Issue 7, pp. 407-411, 2016.<br>Vishal Singh, Maninder Singh, "Dynamic Clustering and Scheduling with Multipath |
| 24. | Selection Cross Layer Protocol for Efficient Energy Management in Wireless Sensor                              |
|     | Network", International Journal of Advance Research in Computer Science and                                    |
|     | Management Studies, Volume 4, Issue 7, pp. 132-139, 2016   |
| 25. | Shivani Sharma, Maninder Singh, "A Modified FIFO with Distributed and Pipelining                               |
| 20. | Scheduling in Hadoop", Imperial Journal of Interdisciplinary Research, Vol-2, Issue-10, pp.                    |
|     | 1839-1843, 2016  |
| 26. | Mukhtiar Singh, Maninder Singh "Design and Implementation of INFO Protocol for                                 |
|     | Collecting the Information of Neighbourhoods Nodes and Their Bandwidth in                                      |
|     | IEEE802.11e: A Survey". International Journal of Computer Trends and Technology                                |
|     | (IJCTT) V40(2), pp. 65-72, October 2016  |
| 27. | Samanpreet Kaur, Maninder Singh, "To Propose a Novel Technique to Detect and Isolate                           |
|     | Zombie Attack in Cloud Environment", INTERNATIONAL JOURNAL OF ADVANCED   |
|     | COMPUTER RESEARCH AND NETWORKS, Volume 1, Issue 2, pp., 2016.  |
| 28. | Saravjit Chahal, Maninder Singh, "A Novel Contact Based Mechanism to Decrease                                  |
|     | Overhead Ratio in Delay Tolerant Networks", International Journal of Scientific Research                       |
|     | in Computer Science and Engineering, Vol.5, Issue.3, pp.53-56, June 2017.                                      |
| 29. | Saravjit Chahal, Maninder Singh, "An Extensive Literature Review of Various Routing                            |
|     | Protocols in Delay Tolerant Networks", International Research Journal of Engineering and                       |
|     | Technology, Volume: 04 Issue: 07, pp. 1309-1312, 2017.   |
| 30. | Sunil Kumar, Maninder Singh, "Detection and Isolation of Zombie Attack under                                   |
|     | Cloud Environment", ORIENTAL JOURNAL OF COMPUTER SCIENCE &   |
| 0.1 | TECHNOLOGY, Vol. 10, No. (2), pp. 338-344, June 2017.  |
| 31. | Shruti Walia, Maninder Singh, "An Efficient Reliable Approach for Low Packet Losses in                         |
|     | HRT (Hard Real Time)" NTERNATIONAL JOURNAL OF RESEARCH IN ELECTRONICS  |
|     | AND COMPUTER ENGINEERING, VOL. 5 ISSUE 3, pp. 246-251, 2017.   |

| 32. | Neha Sharma, Maninder Singh, "An Optimize Energy Efficient Approach to Analyze the Performance of MAC Layer Protocol for IEEE 802.11 Standards", INTERNATIONAL JOURNAL OF RESEARCH IN ELECTRONICS AND COMPUTER ENGINEERING", VOL. 5 ISSUE 3, pp. 207-212, 2017    |
|-----|---|
| 33. | Parul Raj, Maninder Singh, "An Efficient Delay Based Performance for IEEE 802.11e<br>EDCA Systems", INTERNATIONAL JOURNAL OF RESEARCH IN ELECTRONICS AND<br>COMPUTER ENGINEERING, VOL. 5, ISSUE 3, pp. 252-257, 2017.   |
| 34. | Ravneet Pal Kaur, Maninder Singh, "An Energy Efficient Routing Scheme for Mobile<br>Wireless Sensor Network with Mobile Sink", International Journals of Advanced Research<br>in Computer Science and Software Engineering, Volume-7, Issue-8, pp. 100-105, 2017. |
| 35. | Simardeep Kaur, Mainder Singh "A Survey: Big Data Analytics in Health", International Journal of Computer Trends and Technology (IJCTT), Vol. 50(3), pp. 143-146, August 2017.  |

- 13. Area of Research: Mobile Computing, Network Security, Big Data Analytics 14.Regular Research Scholars under Scholarship

| Name           | Scholarship Name                 |
|----------------|----------------------------------|
| Simardeep Kaur | Maulana Azad National Fellowship |

- 15. Copyright/Patents: N.A.
- 16. Any Other Achievements to be mentioned on the webpage: N.A.17. Any other relevant information to be mentioned on the webpage